

What is claimed is:

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5 1. A slitter blade assembly for cutting off a workpiece, comprising:

a drum-shaped rotary blade; and

a disk-shaped rotary blade;

10 said disk-shaped rotary blade having a cutting edge, a first beveled surface facing said drum-shaped rotary blade and progressively spaced from said drum-shaped rotary blade toward said cutting edge, and a second beveled surface facing the workpiece and progressively spaced from said cutting edge away from the workpiece.

15 2. A slitter blade assembly according to claim 1, wherein the distance CL of said first beveled surface up to said cutting edge along a severance plane perpendicular to a surface of the workpiece is set to a value which ranges from 40 μm to 200 μm , the angle θ_6 of said first beveled surface from said severance plane is set to a value which ranges
20 from 0.8° to 14°, and the angle θ_1 of said second beveled surface from said severance plane is set to a value which ranges from 65° to 85°.

25 3. A slitter blade assembly according to claim 2, wherein said disk-shaped rotary blade has a first clearance surface contiguous to said first beveled surface, and the angle θ_3 of said first clearance surface from said severance

plane is set to a value which ranges from 2° to 5°.

4. A slitter blade assembly according to claim 2, wherein said disk-shaped rotary blade has a second clearance surface contiguous to said second beveled surface, and the angle θ_2 of said second clearance surface from said severance plane is set to a value which ranges from 20° to 45°.

5. A slitter blade assembly according to claim 4, wherein said second beveled surface and said second clearance surface are joined to each other at a junction, and the distance L1 from said junction to said severance plane is set to a value which ranges from 0.2 mm to 0.8 mm.

6. A slitter blade assembly according to claim 1, wherein said cutting edge of the disk-shaped rotary blade has irregularities along a circumference of the disk-shaped rotary blade, said irregularities having an irregularity quantity G set to a value which ranges from 0.5 μm to 5 μm .

7. A slitter blade assembly according to claim 1, wherein said disk-shaped rotary blade and/or said drum-shaped rotary blade is made of a cemented carbide.

8. A slitter blade assembly for cutting off a workpiece, comprising:

a drum-shaped rotary blade; and

a disk-shaped rotary blade;

said drum-shaped rotary blade having a cutting edge and
a third beveled surface facing said disk-shaped rotary blade
and progressively spaced from said disk-shaped rotary blade
toward said cutting edge.

9. A slitter blade assembly according to claim 8,
wherein the distance HL of said third beveled surface up to
said cutting edge along a severance plane perpendicular to a
surface of the workpiece is set to a value which ranges from
25 μm to 500 μm , and the angle θ_5 of said third beveled
surface from said severance plane is set to a value which
ranges from 0.0° to 0.6° .

10. A slitter blade assembly according to claim 9,
wherein said drum-shaped rotary blade has a third clearance
surface contiguous to said third beveled surface, and the
angle θ_4 of said third clearance surface from said severance
plane is set to a value which ranges from 2° to 4° .

11. A slitter blade assembly according to claim 8,
wherein said disk-shaped rotary blade and/or said drum-
shaped rotary blade is made of a cemented carbide.

12. A slitter blade assembly for cutting off a
workpiece, comprising:

a drum-shaped rotary blade; and

a disk-shaped rotary blade;

5 said disk-shaped rotary blade having a cutting edge, a first beveled surface facing said drum-shaped rotary blade and progressively spaced from said drum-shaped rotary blade toward said cutting edge of the disk-shaped rotary blade, and a second beveled surface facing the workpiece and progressively spaced from said cutting edge of the disk-shaped rotary blade away from the workpiece;

10 said drum-shaped rotary blade having a cutting edge and a third beveled surface facing said disk-shaped rotary blade and progressively spaced from said disk-shaped rotary blade toward said cutting edge of the drum-shaped rotary blade.

15 13. A slitter blade assembly according to claim 12, wherein said disk-shaped rotary blade and/or said drum-shaped rotary blade is made of a cemented carbide.

20 14. A slitter blade assembly according to claim 12, wherein the distance CL of said first beveled surface up to said cutting edge along a severance plane perpendicular to a surface of the workpiece is set to a value which ranges from 40 μ m to 200 μ m, the angle θ_6 of said first beveled surface from said severance plane is set to a value which ranges
25 from 0.8° to 14°, the angle θ_1 of said second beveled surface from said severance plane is set to a value which ranges from 65° to 85°, the distance HL of said third

beveled surface up to said cutting edge along a severance plane is set to a value which ranges from 25 μm to 500 μm , and the angle θ_5 of said third beveled surface from said severance plane is set to a value which ranges from 0.0° to 0.6° .

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